

Remarks

The Applicant herein amends Claims 69, 70, 71, 78, and 80 to clarify the claim language such as that the P frame is based on differences between two frames, including the I frame. The Applicant respectfully submits that those claims are now in condition for allowance, or at least for appeal.

Claims 69-81 stand rejected under 35 USC §103(a) as being unpatentable over Tahara in view of Tinker. The Applicant respectfully submits that Claims 69-81 are patentable over the art of record and respectfully refers the Examiner to the above claim amendments and the reasons set forth below.

Claim 69 recites “a method of distributing video sequences in a coded stream,” where the coded stream is made up of a succession of frames. Each frame includes “at least one intra-frame coded image (I picture) and at least one prediction coded image corresponding to differences between at least two images of the succession of images.” An original coded stream is analyzed prior to transmission, and a first modified stream and a second stream are generated. The two generated streams are separately transmitted from a server to a destination device. At the destination device, the first modified stream and the second stream are synthesized to reconstruct the original stream.

The first modified stream, as recited in Claim 69, includes a modified Prediction coded image modified so that a resulting video sequence is visually altered and an I picture that is not modified. The first modified stream maintains an encoding system applied to the original coded stream after the modification. The second stream includes digital information for allowing reconstruction from the modified Prediction coded image. Thus, the method according to Claim 69 modifies the Prediction coded image so that an encoding system, such as an MPEG reader, is

not disturbed by the modifications. The second stream is sent separate from the first modified stream to prevent copies of the original coded stream being made and distributed. Then the information in the second stream, which provides for a reconstruction to the original coded stream, is used with the first modified stream for reconstruction at the destination device.

Tahara is directed to splicing video streams for digital broadcasting. Splicing refers to “the technique of connecting two different coded bit streams so as to generate connected bit streams,” i.e., editing and connecting coded streams. (See column 3, lines 28-34 of Tahara.) Tahara’s system aims to edit coded streams received at a local station by a key station by replacing part of the coded stream with a coded stream portion created or stored at the local station, i.e., connecting two different coded bit streams. Tahara notes that the coding system implements three types of coding; namely intra-frame coding, inter-frame forward predictive coding, and bidirectionally predictive coding. (See FIG. 2, column 3, lines 28-34, and column 3, lines 42-54 of Tahara.) Tahara’s digital broadcasting system includes a key station 30 and a local station 40. At the key station 30, video and audio data for commercials and main portions are connected, coded, and multiplexed to output one multiplexed transport stream. (See Fig. 7 and column 9, lines 24-65 of Tahara.) At the local station 40, the multiplexed transport stream is demultiplexed, converted into elementary streams, coded, recorded, and spliced with streams produced at the local station 40. (See Fig. 7 and column 10, line 9-column 11, line 21 of Tahara.)

The Applicant respectfully submits that Tahara’s system does not analyze an original coded stream and generate, based upon the analysis of the original coded stream, a first modified stream and a second stream prior to transmission, as recited in Claim 69. Instead of taking an original stream and modifying it to create a first and second stream, Tahara takes separate and

distinct data streams, then connects and multiplexes the streams to form one multiplexed transport stream. In Tahara there is no second stream that includes information necessary for a reconstruction of the first modified stream to the original stream. Instead, Tahara's digital broadcasting system deals with distinct streams. The Rejection notes that Tahara discloses the extraction of coding parameters from encoded streams and that one or more parameters of the encoded streams are changed in accordance with the extracted parameters. (See Page 3 of the Office Action of February 22, 2010.) However, the Applicant respectfully submits that while data may be extracted from the streams in Tahara's system, that data is not used to create second streams. Instead, for example, Tahara describes extracting information related to quantity of bits required for coding a target picture. This information is used to adjust the bit rate but is not used to create supplementary data streams (i.e., the second stream of Claim 69.) (See column 12, lines 56-67 of Tahara.)

The Rejection acknowledges that Tahara fails to disclose the feature of "synthesizing said first modified stream and said second stream at the destination device and reconstructing said original coded stream," as recited in Claim 69. Hence, the rejection turns to Tinker for this teaching. (See Page 4 of the Office Action of February 22, 2010.) Tinker is directed to compressing and multiplexing video information in a manner that preserves the fidelity of the video information. Tinker describes a video compression unit 21 that includes MPEG encoders and a multiplexer. Color input video signals are input to a corresponding MPEG encoder to produce compressed output signals, which are multiplexed to form a compressed bitstream. A video decompression unit 43 extracts from the compressed bitstream the compressed video streams, which are then input to a corresponding MPEG decoder to produce multiple video signals. (See FIG. 2 and column 8, line 37-column 9, line 21 of Tinker.) Thus, Tinker's system

does not separately transmit two generated streams from a server to a destination device, as required in the method of Claim 69. Instead, and in sharp contrast to Claim 69, Tinker transmits one multiplexed, compressed bitstream between units. Moreover, Tinker does not synthesize the two streams to reconstruct the original stream, as recited in Claim 69, but instead deconstructs the multiplexed, compressed bitstream.

Moreover, the Applicant respectfully submits that Tinker does not remedy the deficiencies described above with respect to Tahara. In particular, Tinker does not describe generating a first modified stream and a second stream as recited in Claim 69.

Therefore, as the combination of Tahara and Tinker does not disclose each feature recited in Claim 69, the Applicant respectfully submits that Claim 69 is patentable over any theoretical combination of Tahara and Tinker.

Independent Claims 78 and 80 recite, similar to claim 69, the creation of a first modified stream and a second stream from an original coded stream. Therefore, the Applicant respectfully submits that Claims 78 and 80 are patentable over Tahara and Tinker for the same reasons described above with respect to Claim 69.

The Applicant respectfully submits that the above differences set forth with respect to Tahara and Tinker are such that a combination of Tahara and Tinker fails to result in a method, system, and device that contains each and every claimed aspect of the subject matter recited in independent Claims 69, 78, and 80, respectively, and their respective dependent Claims 70-77, 79, and 81. The Applicant respectfully submits that the pending claims are allowable over Tahara and Tinker.

In view of the foregoing, the Applicant submits that the entire Application is now in condition for allowance, which action is earnestly requested.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'TDC', written over a horizontal line.

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